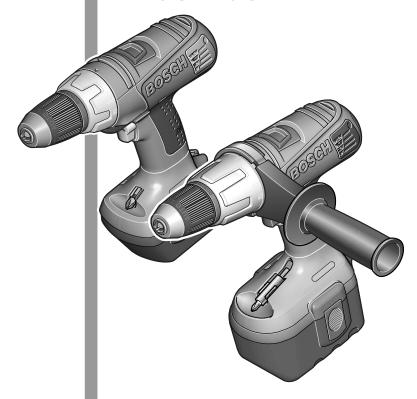
Bedienungsanleitung
Operating Instructions
Instructions d'emploi
Instrucciones de servicio
Manual de instruções
Istruzioni d'uso
Gebruiksaanwijzing
Betjeningsvejledning
Bruksanvisning
Brukerveiledningen
Käyttöohje
Οδηγία χειρισμού
Kullanım kılavuzu

# **BOSCH**

GSB/GSR 12 VE-2 GSB/GSR 14,4 VE-2 GSB/GSR 18 VE-2 GSB/GSR 24 VE-2



Deutsch
English
Français
Español
Português
Italiano
Nederlands
Dansk
Svenska
Norsk
Suomi
Ελληνικά
Türkçe





2 608 572 182



2 607 000 204



#### 2,0 Ah (NiCd)

2 607 335 262 (12 V) 2 607 335 264 (14,4 V) 2 607 335 266 (18 V) 2 607 335 446 (24 V)

#### 2,0 Ah (NiMH)

2 607 335 416 (12 V) 2 607 335 418 (14,4 V)

#### 2,4 Ah (NiCd)

2 607 335 430 (12 V) 2 607 335 432 (14,4 V) 2 607 335 434 (18 V) 2 607 335 448 (24 V)



GSR 24 VE-2 2 602 025 134

GSR 18 VE-2

GSB 12-24 VE-2

2 607 000 205



#### AL 60 DV 1419 (7.2 V - 14.4 V)

2 607 224 440 (EU) 2 607 224 442 (UK) 2 607 224 444 (AUS)



2 607 000 221\* 0,8 x 5,5 mm

2 607 000 239\* PH Nr. 2



#### AL 30 DV 1450 (7,2 V-14,4 V)

2 607 224 702 (EU) 2 607 224 704 (UK) 2 607 224 706 (AUS)



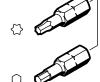
2 607 000 248\* PZ Nr. 2

2 607 000 258\* T 20



#### AL 60 DV 2425 (7,2 V-24 V)

2 607 224 426 (EU) 2 607 224 428 (UK) 2 607 224 430 (AUS)

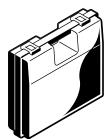


2 607 000 317\* SW 3 mm



#### AL 15 FC 2498 (7,2 V - 24 V)

2 607 224 484 (EU) 2 607 224 486 (UK) 2 607 224 488 (AUS)



GSB 12/14,4 VE-2 GSR 12/14,4 VE-2 2 605 438 535

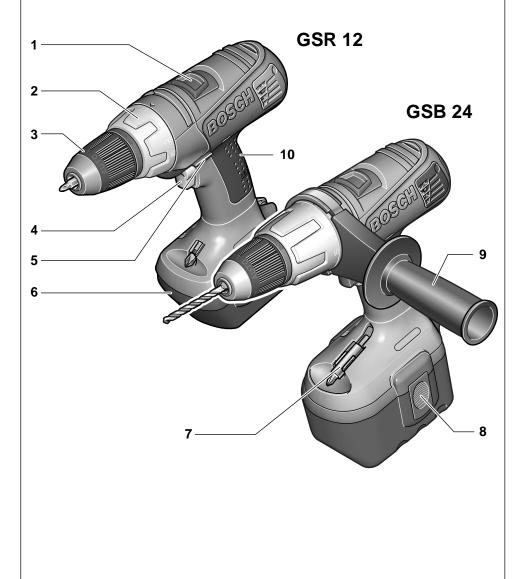
GSB 18/24 VE-2 GSR 18/24 VE-2 2 605 438 536

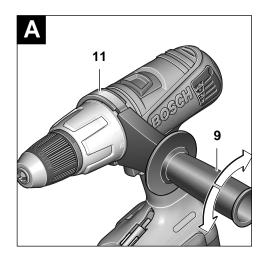


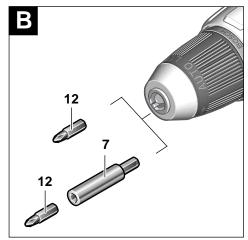
#### AL 60 DC 2422 (7,2 V - 24 V)2 607 224 410

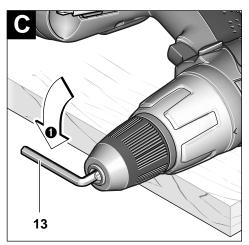
(EU/UK/AUS)

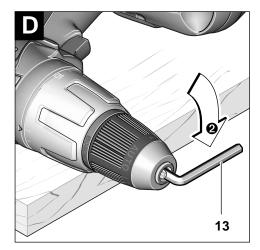


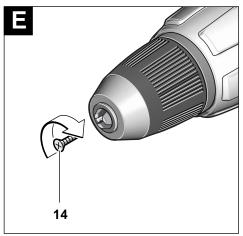


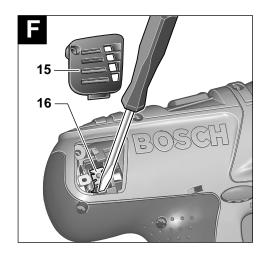












Tool Specifications					
Cordless Screwdriver	GSR	12 VE-2	14,4 VE-2	18 VE-2	24 VE-2
Order number	0 601	912 5	912 4	912 3	912 2
No-load speed					
1st gear	[rpm]	0 - 400	0 - 400	0 - 400	0 - 400
2nd gear	[rpm]	0 - 1400	0 - 1400	0-1 300	0-1300
Torque adjustment range	[Nm]	2-10	2-10	2-10	2-10
Torque, max.					
Soft screwdriving case	[Nm]	26	30	38	44
Hard screwdriving case	[Nm]	65	70	80	85
Drilling dia., steel, max.	[mm]	13	13	13	16
Drilling dia., wood, max.	[mm]	32	35	38	40
Screw diameter, max.	[mm]	8	10	12	14
Chuck clamping range	[mm]	1.5-13	1.5-13	1.5-13	1.5-13
Drill spindle thread		1/2 "	1/2 "	1/2 "	1/2 "
Weight without battery, approx.	[kg]	1.6	1.6	1.6	1.6
-					
Cordless impact drill and					
screwdriver	GSB	12 VE-2	14,4 VE-2	18 VE-2	24 VE-2
Order number	0 601	913 5	913 4	913 3	913 2
No-load speed					
1st gear	[rpm]	0 - 500	0 - 500	0 - 500	0 - 500
2nd gear	[rpm]	0 - 1750	0 - 1700	0 - 1800	0 - 1800
Impact rate	[bpm]	$0-21\ 000$	$0 - 21\ 000$	$0-21\ 000$	$0-21\ 000$
Torque adjustment range	[Nm]	1.5 - 9	1.5 - 9	1.5 - 9	1.5-9
Torque, max.					
Soft screwdriving case	[Nm]	22	24	28	34
Hard screwdriving case	[Nm]	60	65	70	75
Drilling dia., steel, max.	[mm]	13	13	13	16
Drilling dia., wood, max.	[mm]	30	32	35	38
Drilling dia., masonry, max.	[mm]	10	12	14	16
Screw diameter, max.	[mm]	8	8	10	12
Chuck clamping range	[mm]	1.5-13	1.5 – 13	1.5 – 13	1.5-13
Drill spindle thread		1/2 "	1/2 "	1/2 "	1/2 "
Weight without battery, approx.	[kg]	1.8	1.8	1.9	1.9
Battery					
Temperature control		NTC	NTC	NTC	NTC
Rated voltage	[V=]	12	14.4	18	24
Capacity NiCd	[Ah]	2.4	2.4	2.0	2.0
Weight NiCd, approx.	[kg]	0.7	0.8	0.9	1.4
Capacity NiMH	[Ah]	2.0	2.0		
Weight NiMH, approx.	[kg]	0.56	0.65		
Please observe the order number of your machine. The trade names of the individual machines may vary.					

Please observe the order number of your machine. The trade names of the individual machines may vary.

#### **Machine Elements**

- Gear selector
- 2 Torque setting ring
- 3 Keyless chuck
- 4 On/Off switch
- 5 Rotational direction switch
- 6 Battery\*
- 7 Universal bit holder\*
- 8 Battery unlocking button
- 9 Auxiliary handle\*
- 10 Soft grip
- 11 Clamping band\*
- 12 Screwdriver attachment (bit)\*
- 13 Allen key\*
- 14 Locking screw
- 15 Cover lid
- 16 Brush holder
- \* Not all of the accessories illustrated or described are included as standard delivery.

#### **Intended Use**

**GSR:** The machine is intended for the screwing in and loosening of screws as well as for drilling in wood, metal, ceramic and plastic.

**GSB:** The machine is intended for screwing in and loosening screws, for drilling in wood, metal, ceramic and plastic and for impact drilling in brick, concrete and stone.



# **For Your Safety**



Working safely with this machine is possible only when the operating and safety information are read completely and the instructions contained therein are strictly followed. In addition, the general safety notes in the enclosed booklet must be observed.

- Wear safety goggles.
- For long hair, wear hair protection. Work only with closely fitting clothes.
- Before each use, check the machine and battery. If damage is detected, do not use the machine. Have repairs performed only by a qualified technician. Never open the machine yourself.

- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- Before any work on the machine itself (e. g. maintenance, tool change, etc.) as well as when transporting and storing, always set the rotational direction switch to the centre position. Otherwise danger of injury is given when unintentionally actuating the On/Off switch.
- Ensure the switch is in the off position before inserting battery pack. Inserting the battery pack into power tools that have the switch on invites accidents.
- Convince yourself before using that the battery is securely seated in the machine.
- Do not strain the machine so heavily that it comes to a standstill.
- When working with the machine, always hold it firmly with both hands and provide for a secure stance.
- GSB 18 VE-2/GSB 24 VE-2/GSR 18 VE-2/ GSR 24 VE-2: Operate the machine only with the auxiliary handle 9.
- Use appropriate detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance.

Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage.

- Hold the machine tightly: When driving in screws, high reaction moments can briefly occur.
- Never allow children to use the machine.
- Bosch is only able to ensure perfect operation of the machine if the original accessories intended for it are used.

#### **Battery and Battery Charger**

- The enclosed operating instructions for the battery charger must be read carefully!
- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Allow a heated battery to cool before charging.
- Protect the battery from heat and fire: Danger of explosion! Do not place the battery on radiators or expose to strong sun rays for a longer time; temperatures over 50 °C cause damage.
- Do not open the battery, and protect it from impact. Store in a dry and frost-free place.
- When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.
  - Shorting the battery terminals together may cause burns or a fire.
- Do not dispose of the battery in household waste or discard into fire or water.

# **Before Putting into Operation**

## **Battery Charging**

A battery that is new or has not been used for a longer period does not develop its full capacity until after approximately 5 charging/discharging cycles.

To remove the battery **6**, press the unlocking buttons **8** and pull out the battery downwards. Do not exert any force.

The battery is equipped with an NTC temperature control which allows charging only within a temperature range of between 0 °C and 45 °C. A long battery service life is achieved in this manner.

A significantly reduced working period after charging indicates that the batteries are used and must be replaced.

Observe the notes on environmental protection.

# Auxiliary Handle (see figure A) (GSB 12-24 VE-2/ GSR 18-24 VE-2)

Loosen the handle by turning to the left. Rotate the auxiliary handle **9** and adapt to the working position. Make sure that the clamping band **11** of the auxiliary handle remains in the groove.

Afterwards tighten the handle again by turning in clockwise direction.

#### **Changing the Tool**

Open the drill chuck until the tool can be inserted. Insert the tool.

Firmly tighten the sleeve of the keyless chuck **3** by hand until the locking action ("click") is no longer heard. This automatically locks the chuck.

Rotate the sleeve in the reverse direction to remove the tool.

# Screwdriving (see figure B)

Clamp the bit **12** directly into the drill chuck. For quick changes, using the universal bit holder **7** is recommended.

### **Initial Operation**

## Inserting the Battery

Set the rotational direction switch **5** to the centre position = lock-off and allow the charged battery **6** to engage into the handle.

# **Switching On and Off**

To **start** the machine, press the On/Off switch **4** and keep it depressed.



The machine runs with variable speed between 0 and maximum, depending on the pressure applied to the On/Off switch 4. Light pressure results in a low rotational speed thus allowing smooth, controlled starts. Do not strain the machine so heavily that it comes to a standstill.

To switch off the machine, release the On/Off switch 4.

#### **Electric Brake**

When releasing the On/Off switch 4 the speed of the drill chuck is reduced to a stop, thus preventing the run-on of the tool.

For screwdriving applications, wait until the screw is flush with the material and then release the On /Off switch 4. The screw head does not penetrate into the material then.

#### Gear Selection, Mechanical

Two speed ranges can be pre-selected with the gear selector 1:

1st gear: Low rotational speed, high power.2nd gear: High rotational speed, less power.

The gear setting can be changed while the machine is running, however, not while under load. It is recommended to carry out the switching while the machine is at a standstill. If the gear selector 1 cannot be slid into the end position while the machine is at a standstill, turn the chuck somewhat or briefly press the On/Off switch 4.

# Fully Automatic Spindle Locking (AutoLock)

The drill spindle is locked when the On/Off switch 4 is not pressed.

This makes quick and easy changing of the tool in the drill chuck possible.

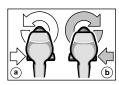
The locked drill chuck enables retightening of projecting screws by using the switched-off machine as a screwdriver.

# **Reversing the Rotational Direction**



Operate the rotational direction switch 5 only at a standstill.

The rotational direction switch **5** is used to reverse the rotational direction of the machine. However, this is not possible with the On/Off switch **4** actuated.



For drilling and driving in screws, set the rotational direction CLOCK-WISE (b).

To drive out screws, switch to the rotational direction ANTICLOCK-WISE ⓐ .

#### **Setting the Torque**

Carry out a practical test to determine with which of the 15 settings of the torque setting ring **2** the screws are driven flush into the material.

- 1 Low setting, e. g., small screws, soft materials.
- High setting, e. g., large screws, hard materials.

With the correct setting, the clutch disengages as soon as the screw is driven flush into the material or the set torque is reached. Select a higher setting when driving out screws, or set to the "Drilling" symbol.

## **Drilling and Impact Drilling**



#### **Drilling**

Set the torque setting ring 2 to the "Drilling" symbol.



#### Hammer Drilling (GSB 12 – 24 VE-2)

Set the torque setting ring **2** to the "Hammer Drilling" symbol.

# **Replacing the Drill Chuck**

Before any work on the machine itself, remove the battery.

The locking screw 14 secures the drill chuck against loosening from the drill spindle. Fully open the chuck and completely unscrew the locking screw 14 (Note: left-handed thread!) (see figure E).

# Loosening the Drill Chuck (see figure C)

Place the machine on a stable surface (e. g. workbench). Hold the machine firmly and loosen the chuck by turning to the left, as when unscrewing a screw (1). Loosen a tight chuck by giving the long end of the Allen key 13 a sharp blow.

# Tightening the Drill Chuck (see figure D)

The drill chuck is mounted in reverse order (2).

#### **Operating Instructions**

#### Soft grip

The gripping surface **10** on the rear of the handle (soft grip) reduces the danger of slipping and thereby improves the grip on the machine and the handling.

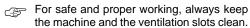
At the same time, the rubber coating achieves a vibration-reducing effect.

#### **Tips**

- Use only screwdriver bits that fit properly in the head of the screw.
- When driving in larger and/or longer screws in hard material, it is advisable to drill a pilot hole first.
- For drilling in metal, use only perfectly sharpened HSS drills. The appropriate quality is guaranteed by the Bosch accessories program.

### **Maintenance and Cleaning**

Before any work on the machine itself, remove the battery.



# Brush Replacement (see figure F)

When the brushes are worn the power tool switches off automatically. For replacement of the carbon brushes, loosen the screws and remove the cover lids 15. Insert a screwdriver or similar into the notch of the brush holder 16 and carefully pry it out. Remove the used carbon brush and replace. The new carbon brush can also be inserted when turned by 180°. Lightly press down the new carbon brush until it clicks. Afterwards mount the cover lids 15 again.

If the machine should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an after-sales service centre for Bosch power tools.

In all correspondence and spare parts orders, please always include the 10-digit order number given on the nameplate of the machine.

#### **Environmental Protection**



# Recycle raw materials instead of disposing as waste

The machine, accessories and packaging should be sorted for environmental-friendly recycling.

These instructions are printed on recycled paper manufactured without chlorine.

The plastic components are labelled for categorized recycling.



#### Nickel-cadmium-bat-

tery: If your product is equipped with a nickel-cadmium-battery, the battery must be collected, recycled or disposed of in an environmentally-friendly way.



Nickel-metalhydrid-battery: If your product is equipped with a nickelmetalhydrid-battery, the battery can be disposed of through the local waste disposal system for solid waste materials.

Defective or worn out batteries must be recycled according to the guidelines 91/157/EEC.

Batteries no longer suitable for use can be directly returned at:

#### **Great Britain**

Robert Bosch Ltd. (B.S.C.) P.O. Box 98 Broadwater Park North Orbital Road Denham-Uxbridge Middlesex UB 9 5HJ

& Service	+44 (0) 18 95 / 83 87 82
& Advice line	+44 (0) 18 95 / 83 87 91
Fax	+44 (0) 18 95 / 83 87 89

#### **Noise/Vibration Information**

Measured values determined according to EN 50 144.

**GSR:** Typically the A-weighted sound pressure level of the product is less than 70 dB (A).

The noise level when working can exceed 85 dB (A).

#### Wear hearing protection!

The typical hand/arm vibration is below 2.5 m/s<sup>2</sup>.

**GSB:** Typically the A-weighted noise levels of the product are: sound pressure level: 89 dB (A); sound power level: 102 dB (A).

#### Wear hearing protection!

The typically weighted acceleration is 12 m/s<sup>2</sup>.

#### Service and Customer Assistance

#### **Great Britain**

Robert Bosch Ltd. (B.S.C.) P.O. Box 98 Broadwater Park North Orbital Road Denham-Uxbridge Middlesex UB 9 5HJ

C	Service	+44	(0)	18	95 /	83	87	82
C	Advice line	+44	(0)	18	95 /	83	87	91
Fax	<b></b>	+44	(0)	18	95 /	83	87	89

#### Ireland

Beaver Distribution Ltd. Greenhills Road Tallaght-Dublin 24

C	Service	+353	(0)	1 /	414	9400	)
Fax	<b>(</b>	+353	(0)	1 /	459	8030	)

#### Australia

Robert Bosch Australia L.t.d. RBAU/SPT2 1555 Centre Road P.O. Box 66 Clayton 3168 Clayton/Victoria

#61 (0)1 / 800 804 777 Fax.....+61 (0)1 / 800 819 520

www.bosch.com.au

E-Mail: CustomerSupportSPT@au.bosch.com

#### **New Zealand**

Robert Bosch Limited 14-16 Constellation Drive Mairangi Bay Auckland New Zealand

C	+64 (0)9 / 47 86 158
Fax	+64 (0)9 / 47 82 914

# **( € Declaration of Conformity**

We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents. EN 50 144 (Battery powered products) and EN 60 335 (Battery charger) according to the provisions of the directives 73/23/EEC, 89/336/EEC, 98/37/EC.

€ 02

Dr. Gerhard Felten Dr. Eckerhard Strötgen Senior Vice President Engineering Head of Product Certification

ppa. Feesen i.V. Mobyen

Robert Bosch GmbH, Geschäftsbereich Elektrowerkzeuge

Subject to change without notice